

**The National Science Foundation (NSF) program solicitation for Advanced Technological Education (ATE) (10-539)**

**Program Summary: Full details at:** <http://www.nsf.gov/pubs/2010/nsf10539/nsf10539.htm>

* **Preliminary Proposal Deadline** (These are optional but recommended. Preliminary proposals are read by experienced reviewers and NSF staff. On the basis of these readers' judgment of the likelihood that a full proposal based on the preliminary proposal could be successful in the formal peer review process, NSF will either encourage or discourage the submission of a full proposal. Please see full text for additional information. All preliminary proposals must be submitted via FastLane. Apr 21, 2010 / Apr 21, 2011 / Apr 19, 2012
* **Full Proposal Deadline** (5 PM proposer’s local time) **Oct 21, 2010** / Oct 20, 2011 / Oct 18, 2012

**Synopsis of Program:**

With an emphasis on two-year colleges, the ATE program focuses on the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions and employers to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels. The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathways to two-year colleges from secondary schools and from two-year colleges to four-year institutions; and other activities. Another goal is articulation between two-year and four-year programs for K-12 prospective teachers that focus on technological education. The program also invites proposals focusing on research to advance the knowledge base related to technician education.

**ATE Projects:**

* **Program Development and Improvement:** These projects should increase the relevance of technician education to modern practices and assure an increased number of students with enhanced competencies entering the high performance workplace.
* **Professional Development for Educators**: The ATE program supports projects that provide current secondary school teachers and college faculty with opportunities for continued professional growth in areas that directly impact technician education.
* **Leadership Capacity Building for Faculty:** The vitality and growth of the ATE community is closely linked to industry trends and needs as well as the acumen of the PIs and their institutions who educate technicians.
* **Curriculum and Educational Materials Development (for National Dissemination):** Proposed activities should affect the learning environment, course content, and experience of instruction for students preparing to be science and engineering technicians and for their teachers.
* **Business and Entrepreneurial Skills for Students:** In addition to technical skills and disciplinary content, students entering the industry environment need skills that allow them to understand and work effectively in a business environment.
* **Teacher Preparation:** The foundation for advanced technological education is grounded in strong mathematics, science, and technology education in K-12 schools. The preparation of future teachers who will facilitate student learning in mathematics and science and cultivate an interest in technological careers is an important component of the ATE program.
* **Small Grants for Institutions New to the ATE Program:**  This category seeks to increase the incentive and opportunity for community colleges that have little or no previous experience with the ATE program to undertake projects to improve science and engineering technician education programs or teacher preparation programs that focus on technological education.
* **Conferences and Workshops:** The ATE program supports a small number of conferences, workshops, and special projects that lead to a better understanding of issues in advanced technological education.

**Anticipated Type of Award:**  Standard Grant or Continuing Grant

**Estimated Number of Awards:**    75 to 90

**Anticipated Funding Amount:**   $64,000,000 is anticipated to be available for new and continuing awards in this program in FY2011.

* ATE Projects: approximately 45-60 new awards, ranging from $25,000 to $300,000 per year with duration of up to three years.
* ATE small grants for institutions new to the ATE program: approximately 15 awards for up to $200,000 (each) typically spread over three years.